312 456 8435 1

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated.

[0019] A typical duct assembly 2 of the type with which the invention is intended to be used is shown in Figure [[1]] 6 and consists of an inner metal duct 3, typically composed of steel and 1.00" to 4.00" in diameter, covered by insulation blanket 4, and secure secured by outer insulation shell 5. Insulation blanket 4 and outer insulation shell 5 are composed of materials as previously discussed.

[0020] Figure 1 shows the cuff 10 portion of the invention. Cuff 10 is positioned circumferentially around outer insulation shell 5 of duct assembly 2 as shown in Figure [[1]] 6. Preferably, cuff 10 is composed of multiple plies of fiberglass impregnated with silicon rubber, and, in the most referred preferred embodiment, three plies are used to avoid having cuff 10 rupture due to excessive pressure build-up when installed *in situ* around duct assembly 2. Before securing cuff 10 to duct assembly 2, at least outer insulation shell 5 is cut circumferentially around duct assembly 2. A small amount of outer insulation shell 5 may also be removed to form a narrow gap in outer insulation shell 5.

Figure 1, section A-A, shows a cross sectional view of cuff 10 showing a raised middle portion 15 with shoulders 12 on either side thereof. Shoulders 12 will rest against outer insulation shell 5 of duct assembly 2, while raised middle portion 15 remains above insulation shell 5, thereby defining an annular-shaped void thereunder. Cuff 10 is secured to duct 2 by wrapping shoulders 12 and the adjoining area of outer insulation shell 5 with a heat-resistant, silicon-rubber compound tape, 13, as shown in Figure 6. One example of an appropriate heat-resistant, silicon-rubber tape 13 is sold under the tradename MOX-TapeTM and manufactured by Arlon corporation Corporation of Santa Ana, California. In lieu of heat resistant tape 13, any known method of securing cuff 10 to duct assembly 2 may be used, as long as the passage of air through insulation layer 4 to the void under cuff 10 is not restricted. Cuff 10 should be situated on duct assembly 2 such that hole 14 is in a convenient orientation with respect to the position of existing sensor wires 8 such that air escaping hole 14 will impinge on both of

the sensor wires 8. [05] Because pressures within the inner metal portion 3 of duct assembly 2 can reach up to 45 psig, it can be expected that pressure within the void created between cuff 10 and duct assembly 2 may also experience similar pressures. As a result, it is possible that middle portion 15 of cuff 10 may deform because of bowing due to pressure buildup in the void inside cuff 10. As a result, it is possible that hole 14 may not direct the air escaping therefrom to impinge onto sensor wires 8 when middle portion 15 of cuff 10 is deformed. Therefore, to assist [[is]] in keeping hole 14 pointed toward sensor wires 8, pad 20 is situated on the inside of cuff 10 between cuff 10 and outer insulation shell 5 of duct assembly 2. Pad 20 is configured with two "legs" 26 which may rest on the outer surface of duct assembly 2 and channel 24 between legs 26 which has been provided to allow pressurized air within the void created by cuff 10 to reach the underside of hole 22. Pad 20 is adhered to the inner surface of cuff 10 using any means known in the prior art, such as with room temperature vulcanizing silicon rubber (RTV) adhesive sold by Dow-Corning. Pad 20 is composed of a flexible silicon rubber compound having a durometer of between 20 and 50 Shore hardness, such that pad 20 should align with hole 14 in cuff 10 such that air can flow from the void created by cuff 10 through channel 24, hole 22 and out of hole 14.